

NEW DESCRIPTIONS

DESCRIPTION OF A NEW GENUS OF ECTRICHODIINAE AND TWO NEW SPECIES OF THE GENUS *HAEMATORRHOPHUS* STAL FROM SOUTHERN INDIA (HETEROPTERA: REDUVIIDAE)¹

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(With three text-figures)

A new reduviid genus *Hemihaematorrhophus* gen. nov. with the type species *Hemihaematorrhophus planidorsatus* sp.nov. and two new species of the genus *Haematorrhophus*, namely *Haematorrhophus fovealis* sp.nov. and *Haematorrhophus ruguloscutellaris* sp.nov. have been described and illustrated.

INTRODUCTION

The subfamily Ectrichodiinae is one of the larger subfamilies of Reduviidae. Distant (1904, 1910) while describing the various genera of the subfamily Ectrichodiinae, considered the number of joints of antennae as a primary character for the diagnosis of the various genera and on that basis four to eight joints have been recognised in the various genera of Ectrichodiinae. Later, Cook (1977), while preparing the checklist of the various genera and species of Asian Ectrichodiinae, considered the rostrum as an important character for diagnosis. The genus *Haematorrhophus* has been described by Distant as having six segmented antennae, abdomen and connexivum wrinkled in various patterns and the second and third rostral segments highly swollen. The present genus is placed closer to *Haematorrhophus*.

Since the cataloguing of the genera of this subfamily by Cook (1977) three more genera, namely *Synectrychotes* Livingstone and Murugan (1987), *Neohaematorrhophus* Ambrose and Livingstone (1986), *Echinocoris* Livingstone and Ravichandran (1992) have been added. The genus *Haematorrhophus* has the largest number of described species among Ectrichodiinae and the two species that are described below further add to the Reduviid fauna of the Oriental Region.

Hemihaematorrhophus gen. nov.

Micropterous; violaceous black; antennae six segmented; second rostral segment not incrassated and almost as long as first segment; frontal striations prominent on either side, clypeal carina prominent; scutellum with a pair of nodule like tubercles kept wide apart; the first abdominal segment with median dorsal depression; on either side of the depression smooth; abdomen smooth dorsally with very few faint longitudinal marginal striations; mesosternal tubercle not carinate and not acutely pointed.

It differs from *Haematorrhophus* by the second rostral segment only obscurely incrassated; the abdomen dorsally more or less smooth; and the femoral tubercles not conspicuous.

Hemihaematorrhophus planidorsatus sp.nov.

(Fig. 1)

FEMALE: Length 24-28 mm, width across the abdomen 10-12 mm; violaceous black; elongately ovate; micropterous; frontal striations prominent on either side, clypeal carina prominent; eyes fuscous; second rostral segment not incrassated and almost as long as first segment; the mesosternal furrow shallow posteriorly, anteriorly narrow as a short striated groove, immediately behind this narrow groove the sternal tubercle heaves up prominently; abdominal sternites without any longitudinal furrow, first visible sternites elevated medially with lateral depression; pronotal median furrow transversely divided at the junction as well as behind the junction

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of anterior and posterior lobes, posterior lobe with two transverse ridges; the inner lateral foveation not confluent with the depression of the posterior lobe, but the lateral deeply depressed groove confluent with the depression of the posterior lobe; scutellum with a pair of nodule like tubercles kept wide apart; the median dorsal foveation not interrupted by ridges; mesonotum not visible; the first four abdominal segments with median dorsal depression; on either side of the depression smooth; abdomen smooth dorsally with very few faint longitudinal marginal striations; connexivum dorsally rugulose, posterior most segment entirely dorsally rugulose; fore femora with one prominent and very minute two or three tubercles in the middle, mid femora with a pair of two short tubercles

subapically and basally a single one, hind femora with a pair of very minute subapical tubercles.

Scutellar variations range from obscure knob like lateral tubercle to fairly well formed tuberculate process.

Type Information: *Holotype*: FEMALE, Serial No. 52. *Paratypes* three females all pinned specimens deposited for the present in the reduviid collection of the Division of Entomology, Department of Zoology, Madras Christian College, Tambaram, Madras, India.

Collection Information: *Holotype* collected from underneath stone in Servalar Tropical Rain Forest, Tirunelveli District, Tamil Nadu on 14-10-1987 at elevation 300 MSL, temperature 35°C, and humidity 74%. The *Paratypes* were collected from Yelagiri Hills, North Arcot District, Tamil Nadu, on 18.9.1988 at elevation 1000 MSL, temperature 28°C and humidity 76% and from Alagar Kovil, Madurai District, Tamil Nadu on 18-01-1989 at elevation 350 MSL, temperature 27°C and humidity 84% and also collected from Courtallam, Tirunelveli District, Tamil Nadu on 06.6.1989 at elevation 350 MSL, temperature 28°C and humidity 62%. Since all specimens collected on all occasions are from Tropical Rain Forest only, it is reasonable to suggest that this is a species endemic to that ecosystem of this region.

***Haematorrhophus fovealis* sp. nov.**

(Fig. 2)

MALE: Length 25 mm, width across the abdomen 9.5 mm; apterous; black; elongate; median frontal groove shallow, parafrontal transverse striations obscure; eyes yellowish brown; mesosternal foveation shallow and transversely striated, posteriorly forming prominent tubercle, the first visible abdominal sternite without any longitudinal grooves whereas the next three sternites with incomplete longitudinal groove; the tubercle of fore femora outwardly directed, not highly incrassated; the mid femora with a subapical anterior pair and a middle unpaired small tubercles; hind femora with a small median tubercle and a pair of small subapical

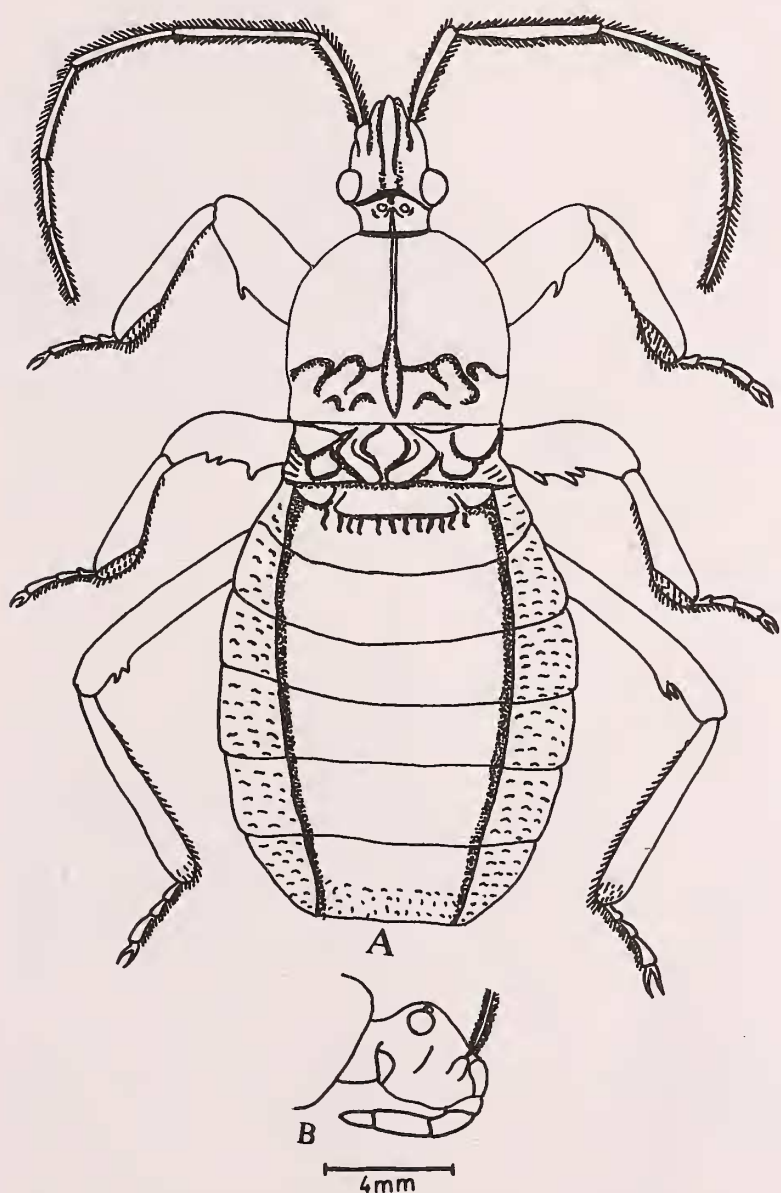


Fig. 1. A. *Hemihematorrhophus planidorsatus* sp. nov.; B. Head-Lateral view.

tubercles one on either side; the scutellum generally globose, with acutely pointed tubercles and deeply grooved in between, median foveation of scutellum deep with slightly rugose wall, lateral wall of scutellum basally rugose with raised rounded inner margin; mesonotum not exposed; pronotal median furrow interrupted by a ridge, lateral inner foveation, outer foveation and its groove and posterolateral depression almost confluent with each other with transverse striations along the groove; dorsum highly

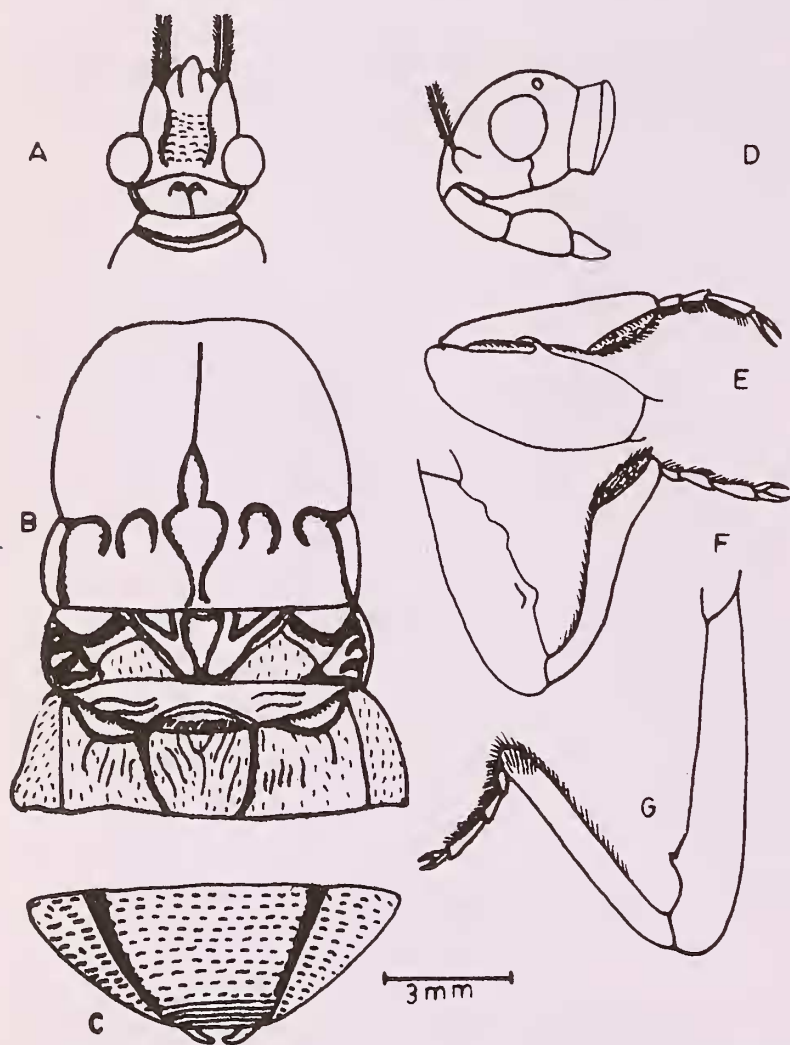


Fig. 2. *Haematorrhophus fovealis* sp. nov.: A. Head-Dorsal view; B. Thorax and anterior abdominal segments; C. Genital segments; D. Head — Lateral view; E. Fore leg; F. Mid leg; G. Hind leg.

rugose with dorso median depression, broader anteriorly and narrow posteriorly up to the fifth segment, depression not confluent with each other.

Type Information: *Holotype*: Male, Serial No. 50, pinned specimen deposited at present in the reduviid collection of the Division of Entomology, Department of Zoology, Madras Christian College, Tambaram, Madras, India.

Collection Information: Single specimen collected from underneath stone in Malumichampatti, Coimbatore District, Tamil Nadu, on 01.8.1989 at elevation 300 MSL, temperature 25° C, and humidity 82%.

***Haematorrhophus ruguloscutellaris* sp. nov.**

(Fig. 3)

FEMALE: Length 23 mm, width across the abdomen 8 mm; elongate; apterous; black; median frontal groove deep, parafrontal cross striations prominent, eyes yellowish brown; mesosternal foveation anteriorly narrow and cross striated, posteriorly the furrow terminating at the base of the median pointed

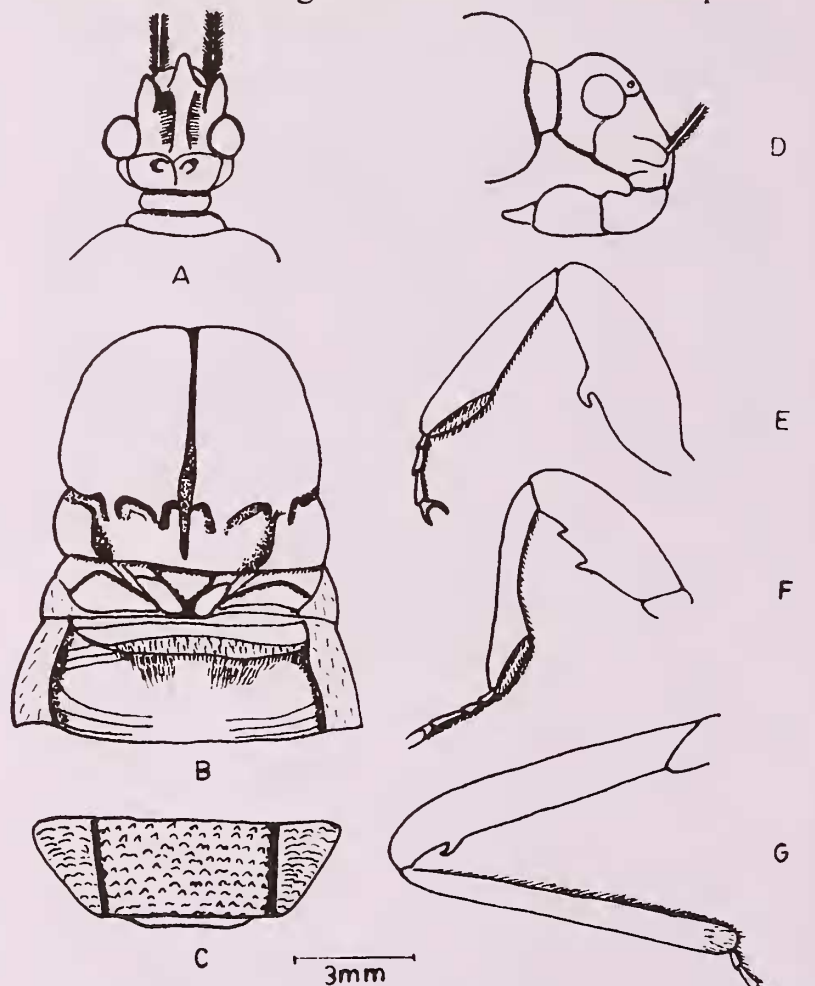


Fig. 3. *Haematorrhophus ruguloscutellaris* sp. nov.: A. Head — Dorsal view; B. Thorax and anterior abdominal segments; C. Genital segments; D. Head — Lateral view; E. Fore leg; F. Mid leg; G. Hind leg.

conical tubercle with a median carina; metasternum obscure; fore femora median tubercle posteriorly directed; mid femora with two or three small tubercles; femora subapically with a pair of small tubercles; abdominal sternites without any median

groove, the first visible abdominal sternite medially elevated by lateral depression; scutellar tubercles obscurely formed, as nodules, set wide apart; lateral margins of scutellum corrugated, median dorsal foveation smooth and narrow; mesonotum not exposed; pronotal median foveation confluent with the posterior one; lateral inner foveation not confluent with any outer foveation cum groove, confluent with posterolateral depression of posterior lobe of pronotum; dorsum of fourth abdominal segment longitudinally rugose, all the rest of the segments transversely rugose; all connexival segments rugose.

Type Information: *Holotype* FEMALE, Serial No. 51. *Paratype* a single male, both pinned specimens

deposited at present in the reduviid collection of the Division of Entomology, Department of zoology, Madras Christian College, Tambaram, Madras, India.

Collection Information: *Holotype* and *Paratype* were collected from underneath a boulder in Manimutharu, Tirunelveli District, Tamil Nadu, on 10.01.1988, at elevation 75 MSL, temperature 29°C and humidity 58%.

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HYPSELOBARBUS KURALI (PISCES: CYPRINIDAE) A NEW LARGE BARB FROM THE SOUTH WESTERN RIVERS OF PENINSULAR INDIA¹

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(With a text-figure)

Hypselobarbus kurali is described as a new species of large barbs from the South-Western rivers of Peninsular India. It is characterised by 4 barbels, a weak articulated last undivided ray with nine branched rays in the dorsal fin, 41-43 scales along the lateral line, 3½-4½ rows of scales between Ll and pelvic origin; silvery with somewhat greyish back, a deep black bar behind the gill opening and the caudal tipped black. The identity of two cyprinid species, *Cyprinus curmuca* Hamilton and *Barbus kolus* Sykes from the east flowing rivers of the Peninsula considered as distinct species is re-examined. *B. kolus* is considered a synonym of *H. curmuca*.

INTRODUCTION

Hamilton (1807) described *Barbus curmuca* from Vedawati river of the Tungabhadra drainage in Mysore, with two barbels, 39 scale rows along the

lateral line and a weak and articulated last undivided dorsal ray. Sykes in 1840 described *B. kolus*, also with the same characteristics from Deccan. Specimens from South Canara with four barbels and the caudal tipped with black, Day (1878) considered as a local variety of *B. curmuca*. In a recent fish collection made by the senior author from different

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